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TITLE: Tropical Medicine Imaging Project (TMIP) Phase II

PRINCIPAL INVESTIGATOR: James G. Smirniotopoulos, M.D.

CONTRACTING ORGANIZATION: Uniformed Services University of the

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### 13. ABSTRACT (Maximum 200 Words)

The objective of this Tropical Medicine Central Resource (TMCR) is to create a global resource for health care providers on Tropical Medicine, with emphasis on the radiology of tropical diseases. This resource would be available on CD-ROM, but would be more universally available over the Internet. By having such a resource available, it will be much more likely that appropriate diagnoses will be made in a timely fashion with corresponding definitive treatment. This will result in decreased morbidity and mortality in both civilian and military populations, and a tremendous cost saving from deferred medical transports and decreased treatment time. Implementation of the project will happen in various phases:

- a. Gleaning optimal images and information for the various diseases (performed by subject matter experts)
- b. Digitizing approved images/photographs
- c. Inserting images and text into an electronic format
- d. Connecting images/text into a database-driven search/retrieve engine
- e. Displaying information over the internet and reproducing information on CD-ROM

Deliverables listed on original SOW:

- 1. Produce a working demonstration "Tropical Medicine Website" from a subset of archived collection of images.
- 2. Produce a Tropical Medicine CD-ROM" from a subset of the archived collection of images.

14. SUBJECT TERMS			15. NUMBER OF PAGES
	gy, imaging, CT, MR, Computed		33
Resonance, X-Rays, bacteria	, virus, fungi, tuberculosis,	, parasite, worms	16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
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James G. Smirniotopoulos, M.D./Maurice Reeder, M.D.

Location: USU

Funding:

Project Description:

Create distance learning materials for teaching the Imaging of Tropical Diseases using a website and a CDROM.



Metrics Used to Demonstrate Success/Efficacy:

(Not yet implemented due to Copyright restrictions on content through User Feedback regarding different modes of presentation of materials. December 2001.



Final Results:

XXXX images scanned

YYYY webpages created

Demonstration CDROM created

Problems Encountered:

Requirement to satisfy Publisher's copyright ownership Original radiographs not available for all illustrations Insufficient resources for all three phases of project: Evolving DoD regulations for \*.mil Websites Requirement for Website Access under ADA Digitization of Text and Images Creation of Linked Webpages Physical Archive



Potential for AMEDD-Wide Adoption:

Distance Learning programs of DoD benefit from TMCR content. Potential for "Learning Theory" Experiments utilizing various methodologies to deliver similar content

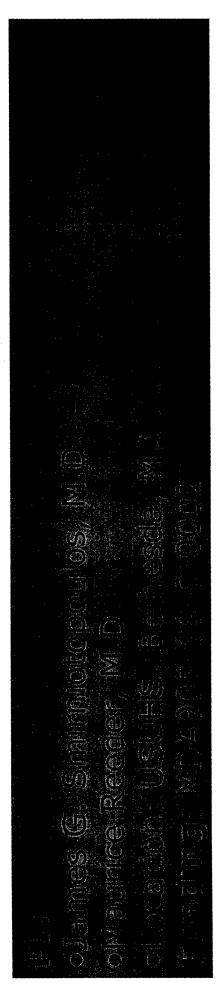


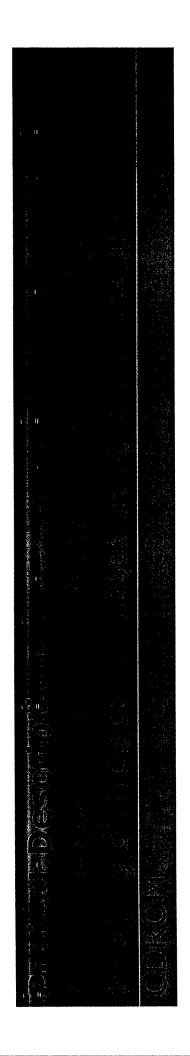
### Conclusions:

encyclopedic library of pathologically proven tropical Instantaneous access to imaging stude is from an disease offers the potential to:

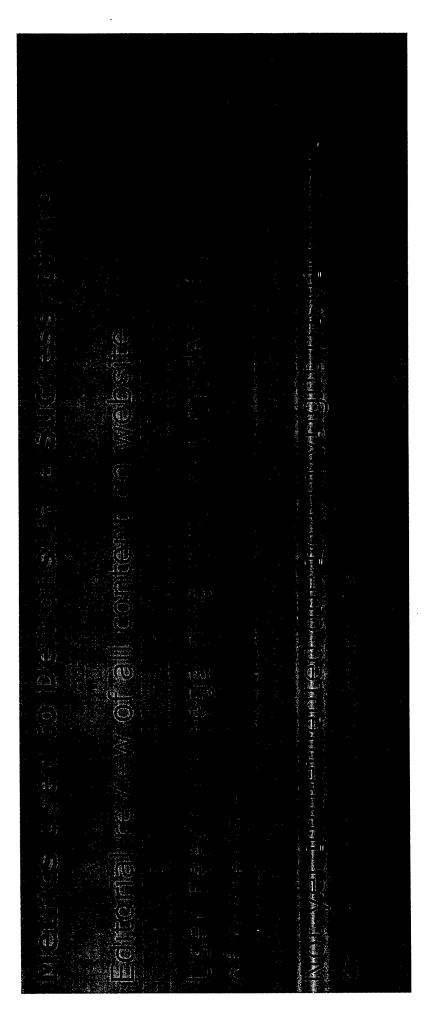
- 1) Improve knowledge of Healthcare pracitioners at all levels
- 2) TMCR can function as a comparative Atlas of Disease Imaging
- 3) Wide distributionn of content possible via Web and CDROM



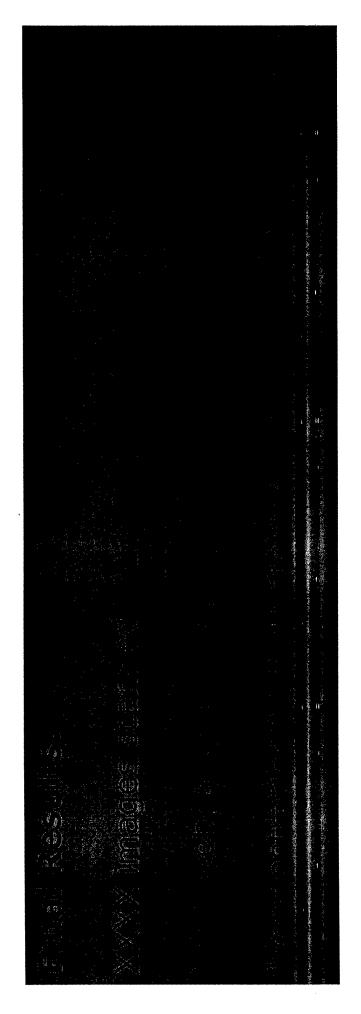




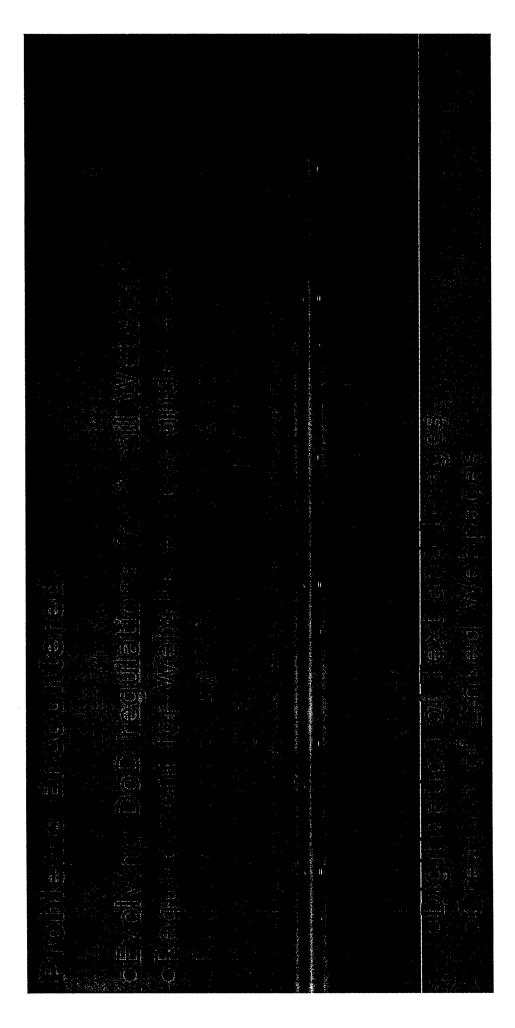




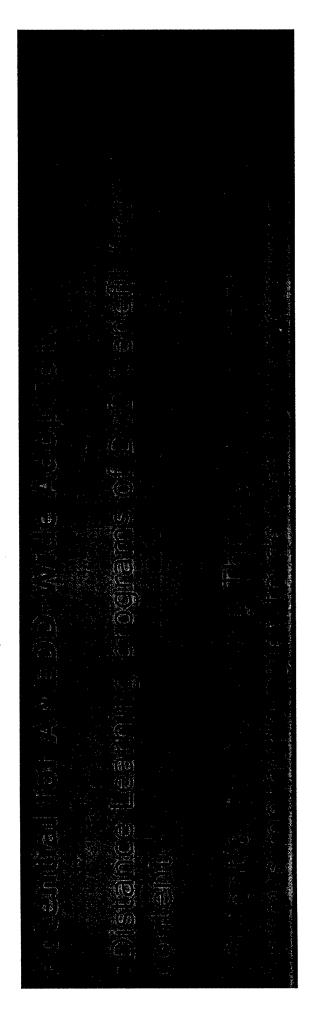














## Poldicial Medicia

## International Registry of Tropical Imaging

The International Registry of Tropical Imaging serves as a worldwide archiving and retrieval source for imaging studies involved in the diagnosis of over 60 parasitic and infectious, neoplastic and miscellaneous diseases affecting over 2 billion people in the tropical and subtropical regions of the globe.

ABOUT TMCR

TMCR DISEASES

TMCR MISSION

TMCR STAFF

TMGR GUESTBOOK

TMCR FEEDBACK



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This is a project of the Radiology Department of the Uniformed Services University.

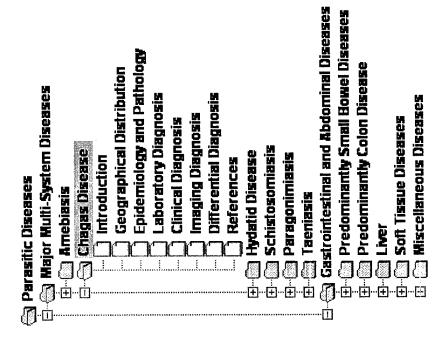
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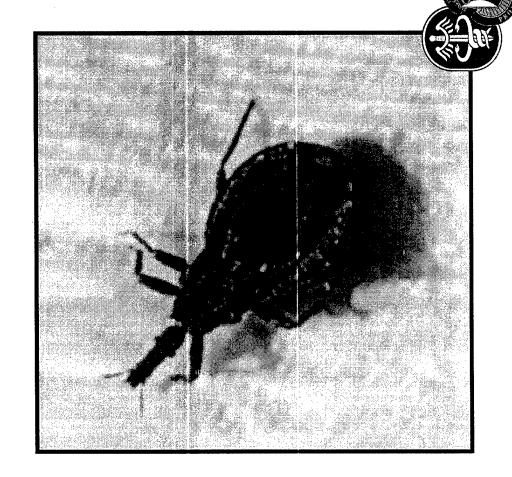
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- **Gastrointestinal and Abdomir**
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### Resource **Fropical Medicine Central**

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### Esophagus

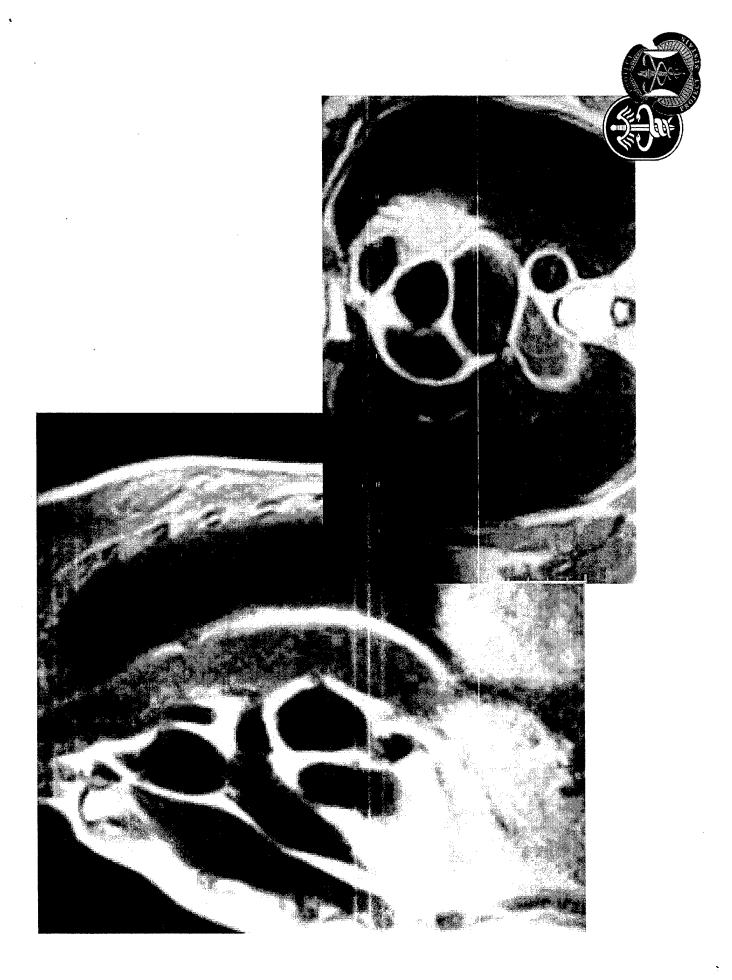
In the esophagus, early changes of motor dysfunction progresses, there is decompensation, dilatation and stasis. Food may become lodged in the esophagus and cause local irritation, leading to inflammation, hypertrophy of the circular muscle layer, often ulceration, bleeding, perforation and fistulas. are hypercontractility and increased tone and resulting in dysphagia. Later, as denervation

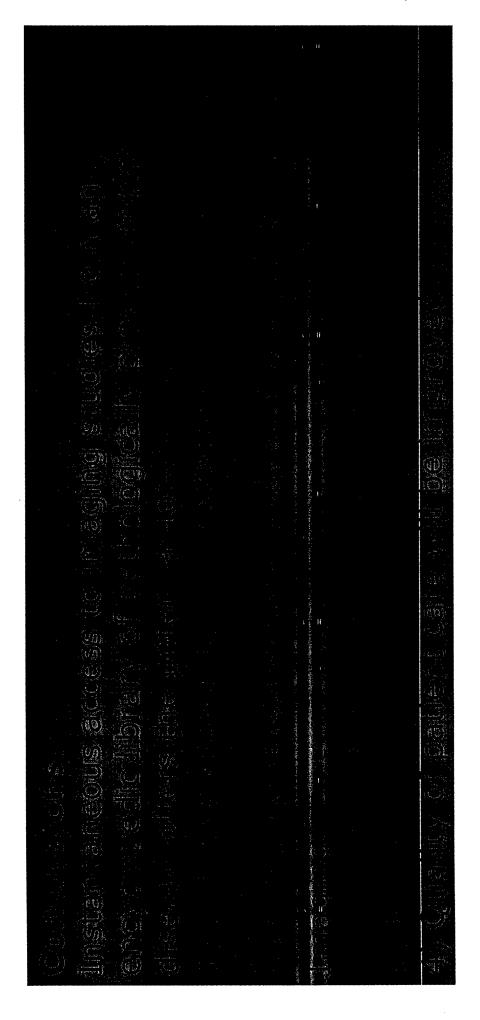
advanced megaesophagus both on plain radiographs flaceld esophagus with a transverse diameter of 7 cm dilatation. Gradually increasing disturbances in tone, rhythm and motility over a number of years give the disease in the esophagus are of motor dysfunction. Initially, tone is maintained and there is little or no or more, exhibiting marked loss of tone with weak, appearance of bizarre, dysrhythmic contractions on entire right paramediastinal border on frontal films. esophagus appears as a vertical density along the however, there may be an extremely dilated and of the chest and on barium swallow is remarkably usually distended with air and sometimes with an The earliest roentgen manifestations of Chagas' similar to achalasia. In both entities the dilated uncoordinated contractions. The appearance of barium swallow (**Fig. 4.8**). In severe infections,



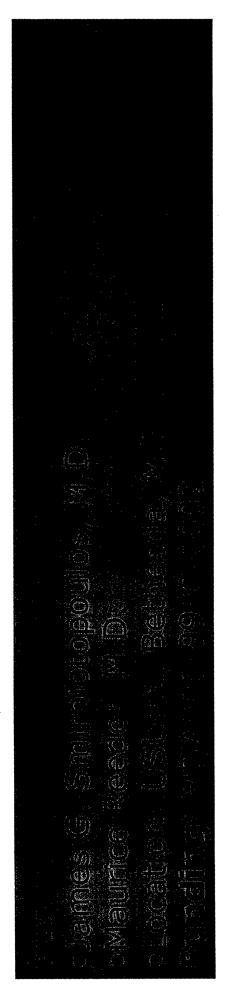






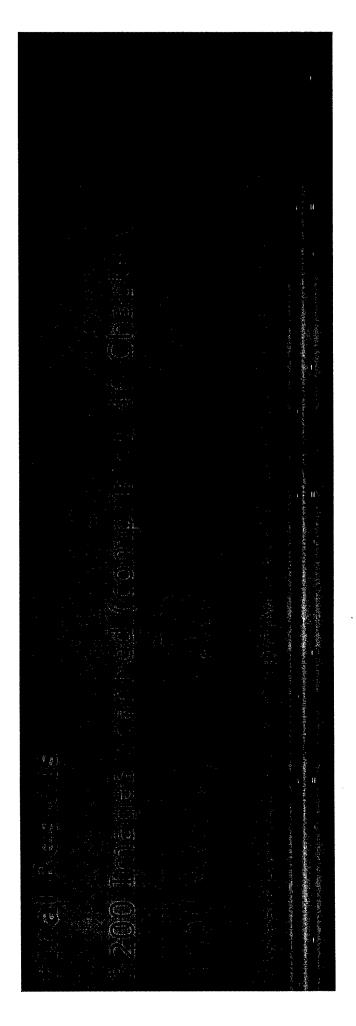




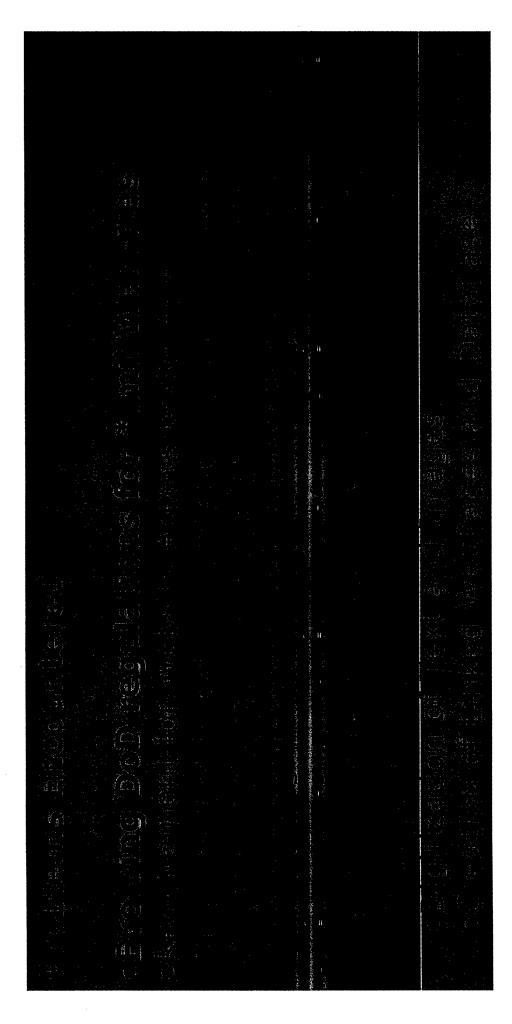




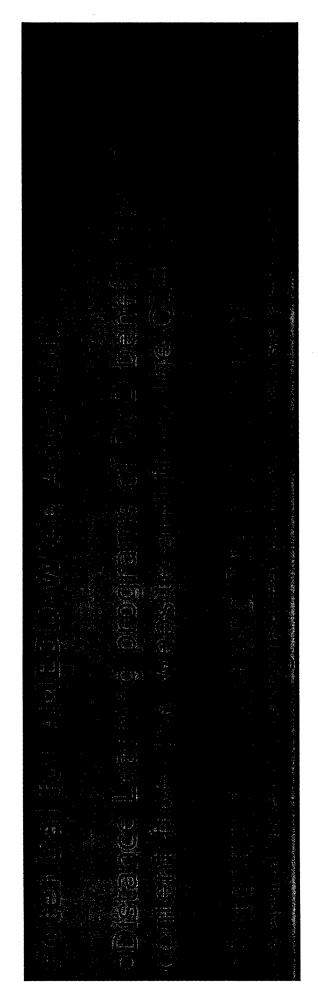














## Follows Income

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This is a project of the Radiology Department of the Uniformed Services University.

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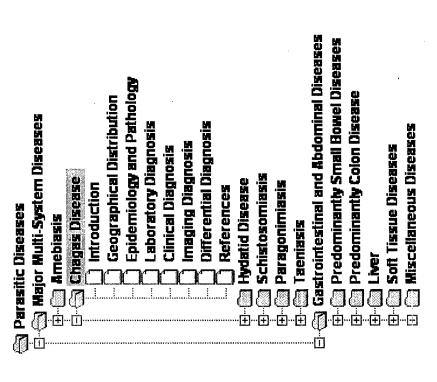
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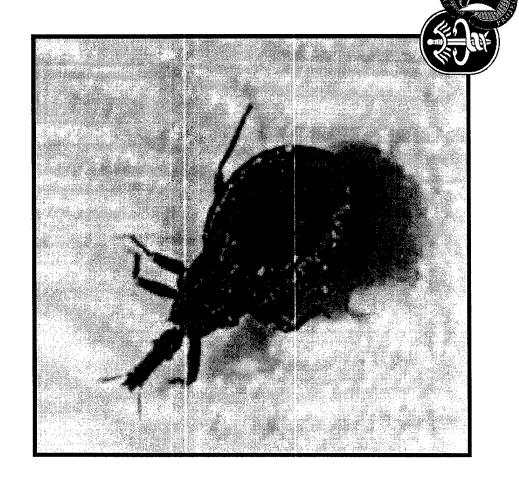
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Esophagus

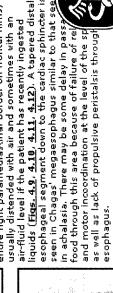
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**Fropical Medicine Central** 

Resource

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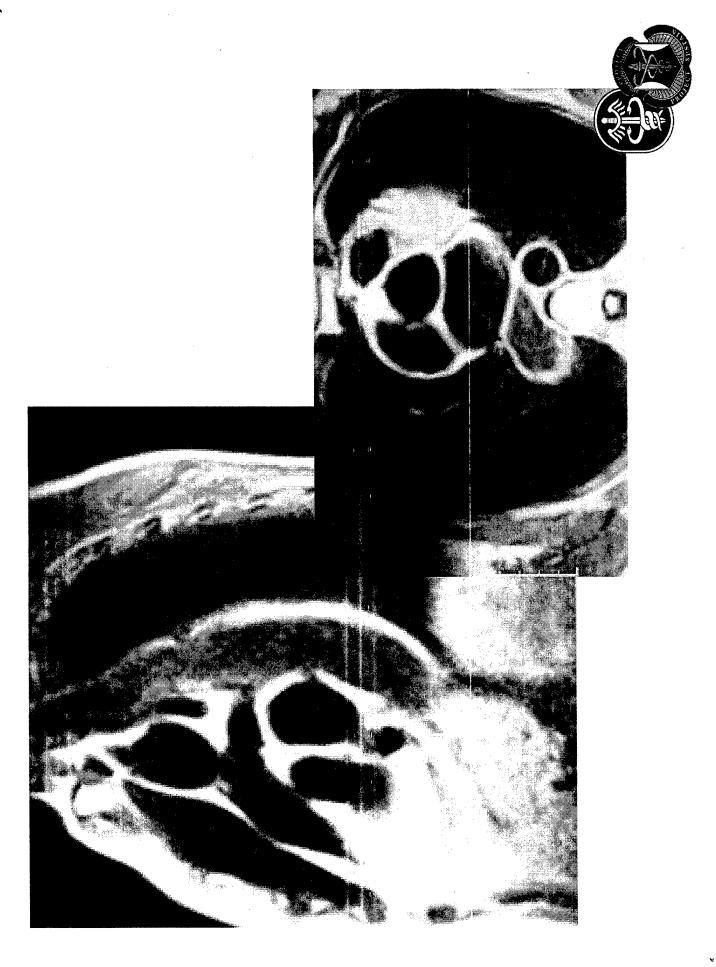
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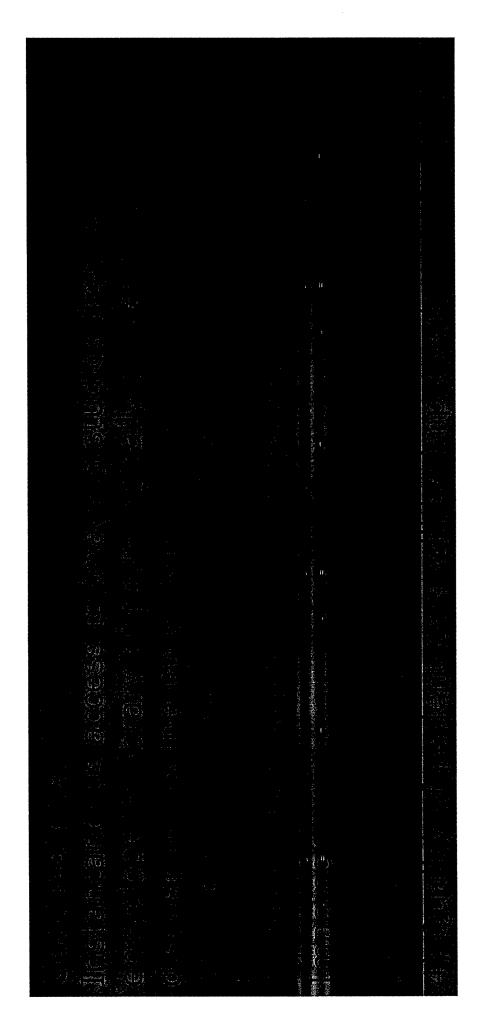














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Chapters	Approximate Number of Images Scanned	Images Belong To:	
Chapter 1	316	Reeder	
Chapter 2	235	Palmers	
Chapter 3	463	Reeder	
Chapter 4	81	Reeder	
Chapter 5	0	Palmers	Not Ready for Scanning
Chapter 6	0	Palmers	Not Ready for Scanning
Chapter 7	138	Reeder	1
Chapter 8	106	Reeder	
Chapter 9	17	Reeder	
Chapter 10	62	Reeder	
Chapter 11	15	Reeder	
Chapter 12	30	Reeder	
Chapter 13	09	Reeder	
Chapter 14	19	Reeder	
Chapter 15	19	Reeder	
Chapter 16	0	Reeder	Not back from Publisher
Chapter 17	25	Reeder	
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Chapter 19	7	Palmers	
Chapter 20	14	Reeder	
Chapter 21	47	Reeder	
Chapter 22	28	Reeder	
Chapter 23	78	Reeder	
Chapter 24	22	Reeder	
Chapter 25	84	Palmers	
Chapter 26	48	Palmers	
Chapter 27	48	Reeder	
Chapter 28	15	Palmers	
Chapter 29	74	Palmers	
Chapter 30	41	Palmers	
Chapter 31	06	Reeder	
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Chapter 35	09	Palmers
Chapter 36	58	Palmers
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Chapter 41	54	Palmers
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Chapter 44	135	Palmers
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Chapter 46	23	Palmers
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